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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,214	10/27/2000	Israel Lifshitz	6727/1H841-US1	8500

7590 08/03/2004  
Darby & Darby PC  
805 Third Avenue  
New York, NY 10022

EXAMINER

SAM, PHIRIN

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 08/03/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/699,214

Applicant(s)

LIFSHITZ ET AL.

Examiner

Phirin Sam

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,7,11,12,18,22-27,30,33,37-39,44 and 48-52 is/are rejected.
- 7) ☒ Claim(s) 2,3,5,6,8-10,13-17,19-21,28,29,31,32,34-36,40-43 and 45-47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 4, 7, 11, 12, 18, 22-27, 30, 33, 37-39, 44, and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cai et al (U.S. Patent 6,536,001) in view of Hwang (U.S. Patent 6,501,791).

Cai et al discloses the invention (**claims 1, 11-12, 18, 25-27, 37-38, 44, 51, and 52**) as claimed including a data transmitter, comprising:

- (a) a frame processor, adapted to arrange a predetermined quantity of the data together with one or more overhead bytes in an overhead frame (see Figs. 4 and 5, elements 64 and 66, col. 7, lines 45-67, and col. 8, lines 1-65).

Cai et al does not disclose an encoder, adapted to divide the overhead frame into equal segments, each of the segments comprising a number of bits that is not necessarily an integer multiple of eight, and to encode each of the segments as a symbol for transmission over a communication channel. However, Hwang discloses the encoder for encoding each of the segments as the symbol for transmission (see Fig. 3, element 330, col. 4, lines 61-67, and col. 5, lines 1-4). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the encoder each of the segments as the symbol for transmission teaching by Hwang with Cai et al. The motivation for doing so would have been to provide to allocate a plurality of tone carriers in the communication system read on column 2, lines 49-51. Therefore, it would have been obvious to combine Hwang and Cai et al to obtain the invention as specified in the claims 1, 11, 12, 18, 25-27, 37, 38, 44, 51, and 52.

**Regarding claims 4, 24, and 30,** Cai et al discloses frame processor comprises a framer, and wherein the overhead bytes comprise one or more framing bytes introduced by the framer (see Fig. 4, col. 7, lines 45-56).

**Regarding claims 7, 22, 23, 33, 39, and 48-50,** Cai et al discloses frame processor comprises an error correction encoder, and wherein the overhead bytes comprise one or more error correction bytes generated by the encoder (see Fig. 4, col. 7, lines 56-62).

***Allowable Subject Matter***

4. Claims 2, 3, 5,6, 8-10, 13-17, 19-21, 28, 29, 31-32, 34-36, 40-43, and 45-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Phirin Sam whose telephone number is (703) 308 - 9294. The Examiner can normally be reached on Monday - Friday from 8:30AM - 4:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Douglas W. Olms can be reached at (703) 305 - 4703. The fax number for the organization where this application or proceeding is assigned is (703) 872 - 9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217 - 9197 (toll-free).

Respectfully submitted,

Date: July 30, 2004

A handwritten signature in black ink, appearing to read 'Phirin Sam', written over a horizontal line.

Phirin Sam  
Patent Primary Examiner